SimSteering 2

USER MANUAL

SimSteering 2

INCLUDED IN THE BOX

- Steering Motor
- Motor Cables
- Control Box
- Emergency Stop Button
- 3m USB cable
- Power Cord (UK, EU or US plug end)

WARNING
Before you use this product, please read this documentation carefully.

Electric Shock
- Never unplug any connectors while the system is switched on. This may cause severe injury or even death.
- Store the product in a dry location and do not expose it to dust or direct sunlight.
- Ensure the connectors are inserted into the correct sockets and that the pin alignment is correct.
- Do not twist, pull or force the connectors or cables.
- Do not short-circuit the product.
- Never dismantle the product.
- Do not use any other connectors or cables other than those supplied with the system.
- Do not use any cables if they are split or damaged.
- Unplug the power cable if unused for long periods of time.
- Avoid spilling any liquids on any of the components.

Heat
The surfaces of the motor can be very hot in operation and the surface temperature can exceed 100deg Celsius (212 F). Check the temperature and only handle the motor after it has dropped below 40deg Celsius (104 F).

Air Vents
Ensure that the air vents on the side of the case are not blocked. For optimum ventilation position the case at least 10cm away from any walls or surfaces.

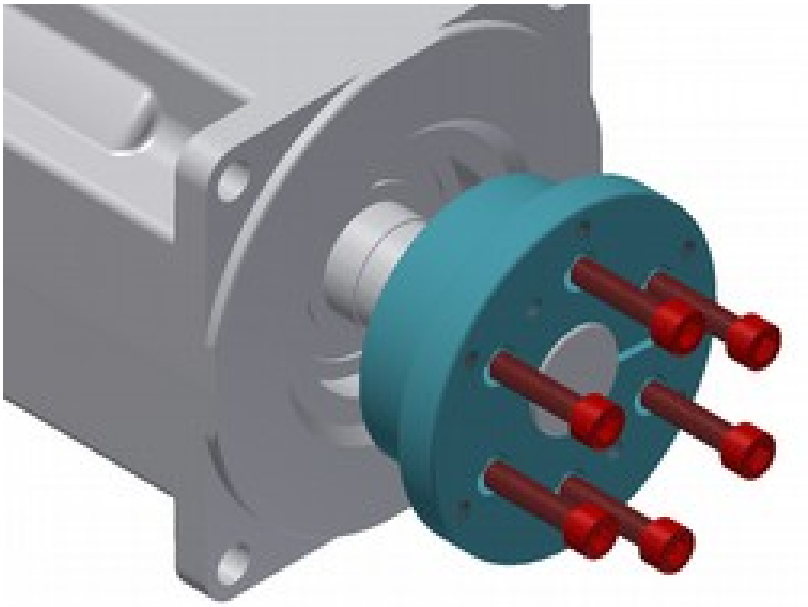
Injuries due to force feedback and repeated movements
Using a force feedback steering wheel may cause muscular or joint pain. To avoid any issues we recommend the following:

- Avoid lengthy usage.
- Take 10 to 15 minute breaks after each 1 hour of use.
- If you feel any fatigue or pain in the hands, wrists, arms, shoulders or neck, stop use immediately and rest.
- If symptoms reoccur, we advise you to consult your doctor.
- Keep out of reach of children.
- During use always use both hands on the steering wheel as much as possible.
- Never place your hand through the steering wheel at any time.
- Ensure the Emergency Stop Button is plugged in and situated within reach during use.

Mounting
Ensure the motor is mounted securely before use. Failure to do so may result in injury.

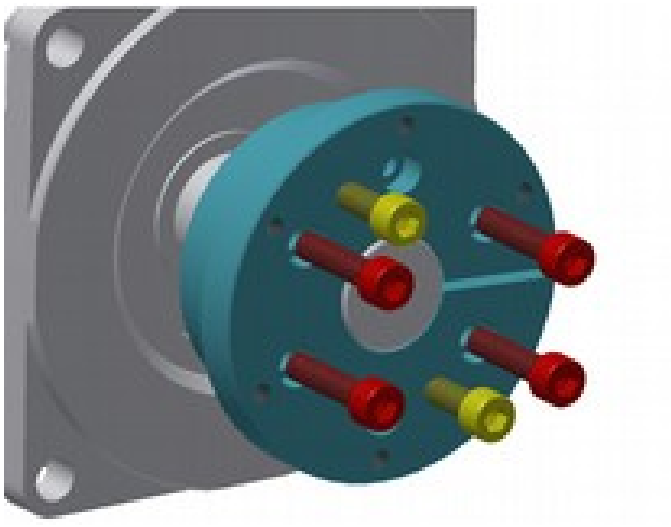
For Professional Use Only

Fitting the Shaft Clamp



Insert the M5 x 25mm bolts (Red) into the six inner counterbored holes and screw into the back ring using the 4mm hex key provided. As each bolt is tightened the two halves of the shaft clamp are pulled together. This will cause the other bolts to become loose so it is necessary to repeat the process multiple times one by one until each bolt feels tight.

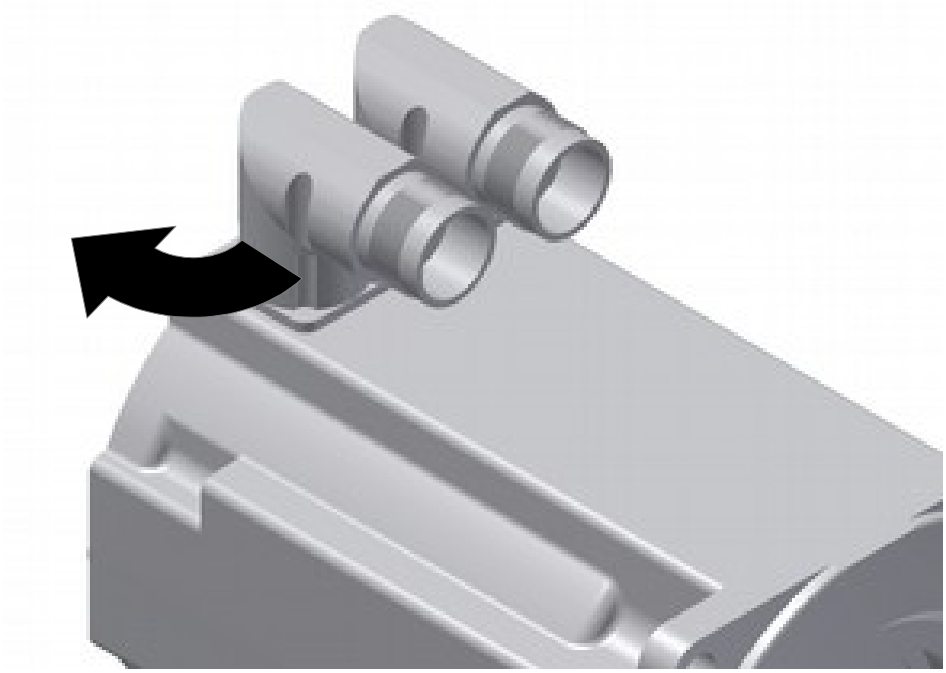
Removing the Shaft Clamp



Extract two of the M5 bolts (yellow) and wind out the remaining 4 (red). Insert the 2 extracted bolts into the two threaded holes offset by 30 degrees and screw in until the bolts push against the back ring. Keep winding the bolts in until the back ring is pushed away from the front. The shaft clamp should then be loose enough to be removed.

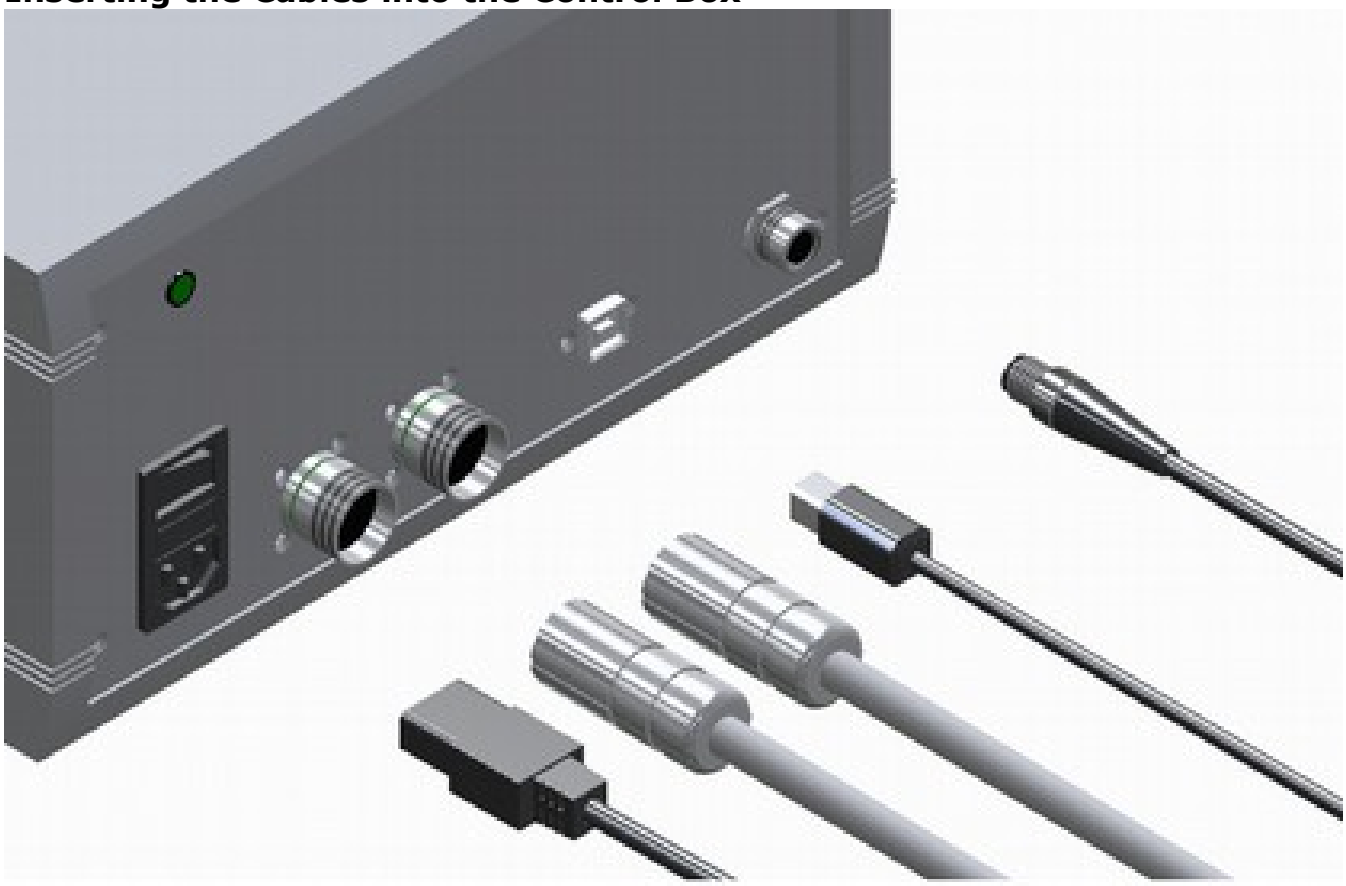
DO NOT USE WD40 AS THIS CAN CAUSE PERMANENT DAMAGE TO THE INTERNALS OF THE MOTOR

Rotating the Motor Connectors



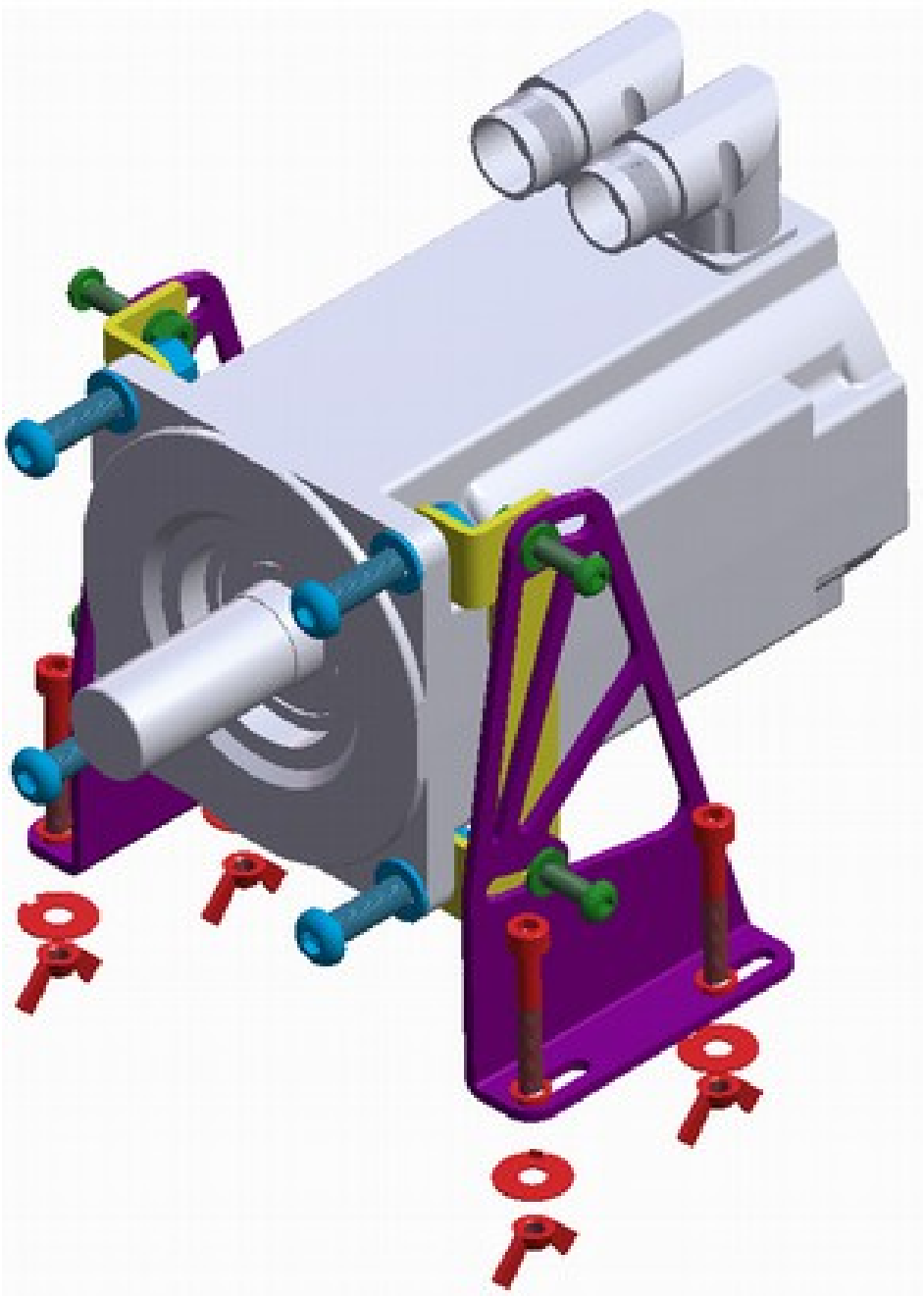
The motor connectors are rotatable and it is not necessary to undo the securing screws holding them to the motor casing. New connectors can be quite stiff however so it may require some force to turn them. The connectors are very robust however it is recommended to only turn them by hand.

Inserting the Cables into the Control Box



Warning – Check the connector pins match before inserting them into the electronic control box. Non matching connectors or misalignment may cause damage to the pins. DO NOT USE EXCESSIVE FORCE

Assembling the Adjustable Mounting Bracket

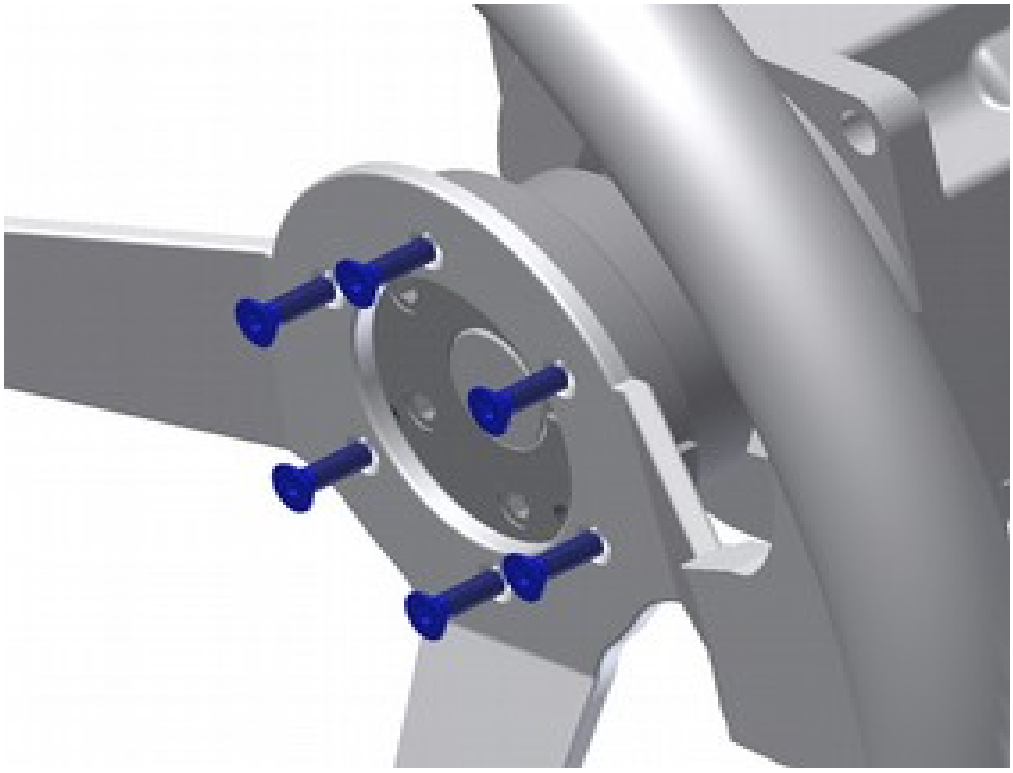


1. Fit the motor plates (Yellow) to the motor using the M8 x 25mm bolts, nuts and washers (Blue) provided.
These fit on the <u>rear</u> of the motor flange as pictured.

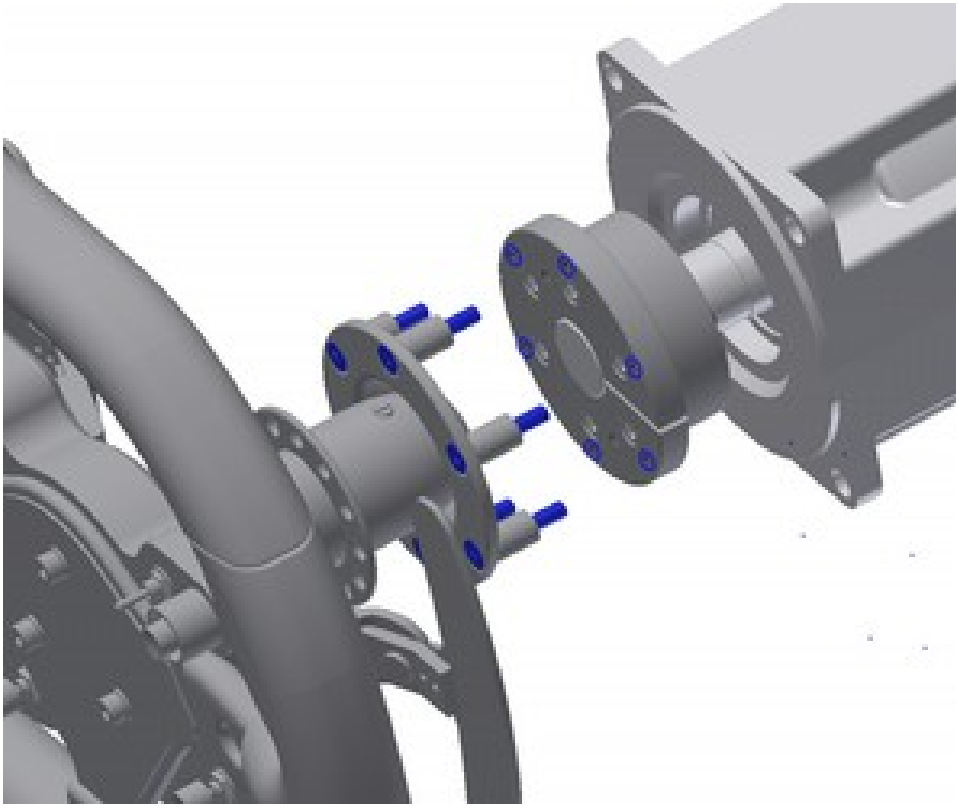
2. Attach the two side mounting plates (Purple) to the motor plates (Yellow) through the top and bottom slots using the M6 x 16mm bolts, nuts and plain washers (Green). The tlt angle is set by the position of the bolts in these slots.

3. Using the drill template included with this manual, drill four holes into your mounting surface. Insert the M6 x 40mm bolts (Red) through the vertical slots at the bottom of the side mounting plates (Purple) and secture in place with the washers and wing nuts.

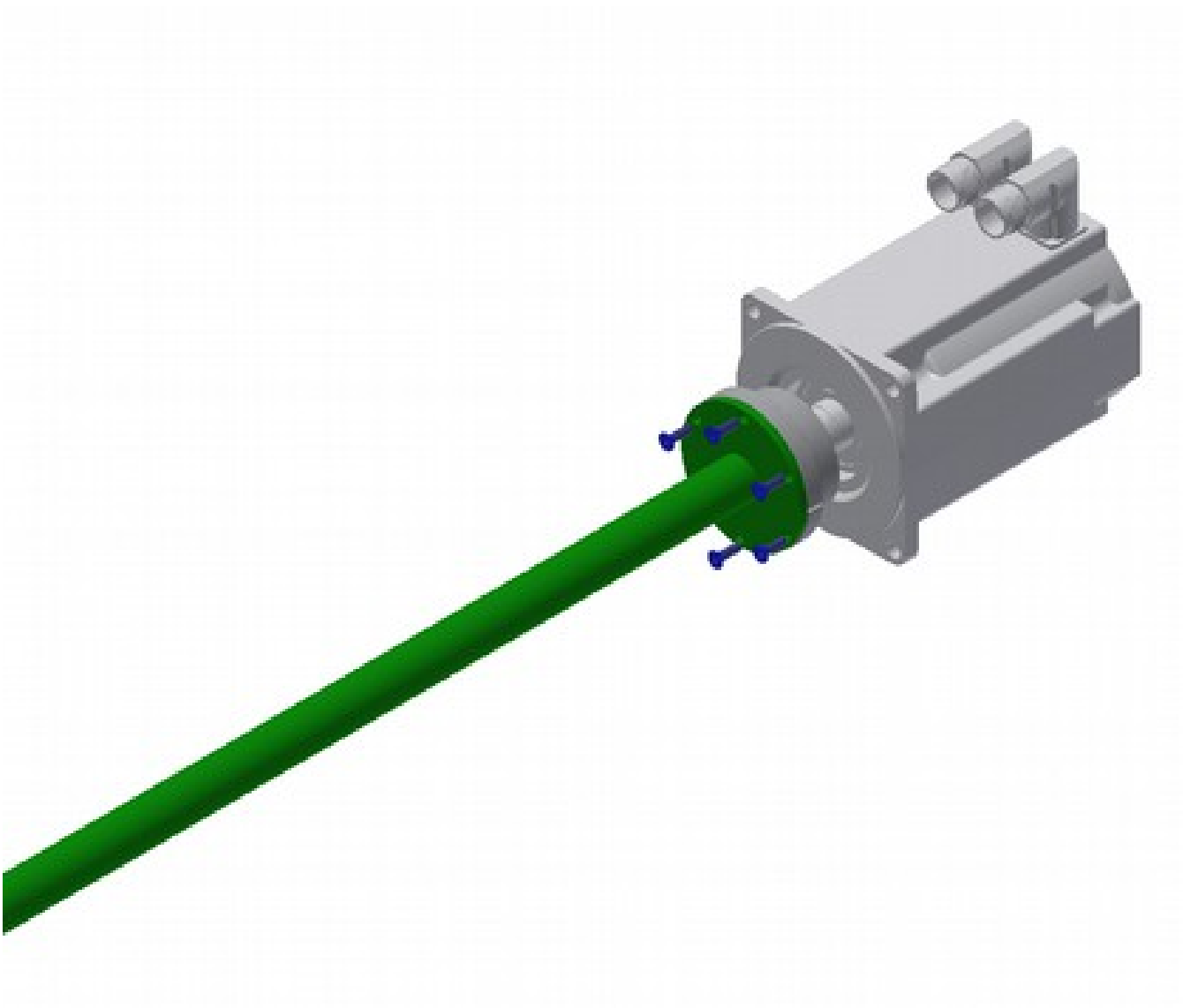
Connecting a Steering Wheel to the Shaft Clamp Adaptor



Direct mounting of a wheel to the shaft clamp



Mounting a wheel to the shaft clamp via a quick release system



Mounting a fabricated steering column to the shaft clamp
NOTE: We do not supply the steering column

System Specifications

SimSteering Control Box
Width: 300mm
Height: - 150mm
Depth: 200mm (excluding connectors)
Weight: 4.1kg

52 Motor	53 Motor	54 Motor
Width: 110mm **Height:** 110mm **Depth:** 160mm (excluding shaft and connectors) **Weight:** 5.6kg	**Width:** 110mm **Height:** 110mm **Depth:** 190mm (excluding shaft and connectors) **Weight:** 7.5kg	**Width:** 110mm **Height:** 110mm **Depth:** 220mm (excluding shaft and connectors) **Weight:** 9.1kg

Shaft Clamp Specifications
Material: Anodised Aluminium
Weight: 260g
Accepted Wheel Bolt Patterns: Outer: 6 x 70mm - Inner: 3 x 50.8mm
Parts Supplied:
Two halves of shaft clamp
6x M5x25mm Bolts
1x 4mm Hex Key
1x Tube of Copper Grease

Motor Bracket Specifications
Material: Painted Stainless Steel
Weight: 650g with fittings
Parts Supplied:
2x Motor Plate
1x Left side plate
1x Right side Plate
4x M6x40mm Bolts
4x M6 Penny Washers
4x M6 Spring washers
4x M6x16mm Bolts
8x M6 Plain Washers
4x M6 Nuts
4x M8x25mm Bolts
8x M8 Plain Washers
4x M8 Nyloc Nuts